

CLAIMS

What is claimed is:

1. An apparatus for clamping a hard disk comprising:
a motor rotating body having a boss inserted in a central hole of the hard disk and having a threaded portion formed on an outer circumferential surface of the boss and an accommodation surface to support a lower surface of the hard disk;
a clamping washer inserted around the boss of the rotating body and placed on an upper surface of the hard disk; and
a clamping nut placed on the clamping washer and coupled to the threaded portion of the boss so as to clamp the hard disk between the clamping washer and the accommodation surface of the rotating body.
2. The apparatus of claim 1, wherein a plurality of holes are formed on a horizontal surface of the clamping nut so that the clamping nut is rotatable by inserting a predetermined jig in the plurality of holes.
3. The apparatus of claim 2, wherein the number of the holes are greater than the number of the holes required for the insertion of the predetermined jig.
4. The apparatus of claim 2, wherein an outer circumferential surface of the clamping nut has a ring shape.
5. The apparatus of claim 1, wherein a plurality of grooves are formed on a horizontal surface of the clamping washer so that, by fixedly inserting a predetermined jig in the grooves, the rotation of the clamping washer is prevented during the coupling of the clamping nut.
6. The apparatus of claim 5, wherein a bottom surface of each of the grooves is closed.

7. A method of clamping a hard disk comprising:
positioning a hard disk drive on a motor rotating body rotatably installed on a base
wherein a boss of the motor rotating body protrudes from a central hole of the hard disk;
inserting a clamp washer around the boss; and
coupling a clamping nut to a threaded portion of the boss.
8. The method of claim 7, wherein the inserting the clamp washer around the boss comprises:
inserting a plurality of fixing pins of a washer jig into a groove formed on the clamp washer; and
fixing the clamp washer to an upper surface of the hard disk.
9. The method of claim 7, wherein the coupling of the clamping nut using to the threaded portion of the boss comprises:
inserting a fixing portion of an electric driver into a central hole formed at a center portion of the boss;
inserting a plurality of rotating portions into a plurality of holes formed on a horizontal surface of the clamping nut;
rotating the plurality of rotating portions so as to rotate the clamping nut which results in coupling the clamping nut to the threaded portion of the boss.
10. The apparatus of claim 2, wherein the predetermined jig comprises:
a fixing portion inserted in a central hole formed at a center portion of a boss; and
a plurality of rotating portions which are rotated by being inserted into the plurality of holes formed on the horizontal surface of the clamping nut.
11. The apparatus of claim 5, wherein the predetermined jig comprises:
a plurality of fixing pins to be inserted into the plurality of grooves to fix the clamping washer to an upper surface of the hard disk.
12. The apparatus of claim 1, wherein the clamping nut is screwed onto the threaded portion of the boss so as to clamp the hard disk between the clamping washer and the accommodation surface of the rotating body.

13. An apparatus for clamping a hard disk comprising:
- a boss inserted in a central hole of the hard disk having a threaded portion formed on an outer circumferential surface of the boss;
 - a clamping washer inserted around the boss and placed on an upper surface of the hard disk; and
 - a clamping nut placed on the clamping washer and which screws onto the threaded portion of the boss.